



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,518	05/19/1999	WAYNE D. GROVER	T-L-CASE-4	5305

7590

06/17/2003

FLYNN THIEL BOUTELL & TANIS PC  
2026 RAMBLING ROAD  
KALAMAZOO, MI 490081699

EXAMINER

TRAN, THIEN D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 06/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/314,518

Applicant(s)

GROVER ET AL.

Examiner

Thien D Tran

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 11-16, 18-22, 24-30 are rejected under 35 U.S.C. 102(e) as being participate by Ellinas et al (U.S Patent No 6,331,905 B1).

Regarding claims 11, 29, 30, Ellinas discloses a telecommunication network comprising:

plural interconnected routers; and

at least one protecting router comprising a router table, the router table having an entry identifying an alternative route around an adjacent router to the protecting router in case of failure of the adjacent router. See col.11 lines 5-25, and figures 13-15.

Regarding claim 20, Ellinas discloses a method of protecting against router failure in a network, in which the network includes plural interconnected routers, the method comprising the step of:

storing at a protecting router an entry identifying a cycle of routers that form at least one alternative route around an adjacent router to the protected router, in which the cycle of routers includes all routers directly connected to the adjacent router and not the adjacent router. See col.10 lines 40-60.

Regarding claim 12, Ellinas discloses that a router table has an entry identifying a port associated with the alternative route. See figure 14

Regarding claims 13, 21, Ellinas discloses that the alternative route includes a cycle of routers directly connected to the adjacent router and there is associated with each router in the cycle of routers a routing table with an entry identifying the cycle of routers. See col.7 lines 35-45.

Regarding claims 14, 26, 27, Ellinas discloses the protecting router, comprising a router table, the router table having an entry identifying a cycle of routers directly connected to an adjacent router to the protecting router, the cycle of routers not including the adjacent router. See figure 11, col.17 lines 10-25.

Regarding claims 15, 28, Ellinas discloses that the router table has an entry identifying a port associated with the cycle of routers. See figure 14.

Regarding claims 16, 25, 24, Ellinas discloses that the protecting router has a router table in which is stored, for each adjacent router to the protecting router, an entry identifying a cycle of routers directly connected to the adjacent router to the protecting

Art Unit: 2665

router, each cycle of routers not including the respective adjacent router. See col.15 lines 30-50.

Regarding claims 18, 19, 22, Ellinas discloses a number of routing paths in a group cycle (path cost field). See figure 13.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellinas et al (U.S Patent No 6,331,905 B1).

Regarding claims 17, 23, Ellinas discloses a data packet for a network of routers, data packet comprising: a restoration network specifies a cycle of routers in which the routers in the cycle are all adjacent a router not in the cycle and a data message (data field). See col.11 lines 60-65 and col.18 lines 30-50.

Ellinas does not disclose that the data message or packet comprising an ID field specifies a cycle of router. However, it would have been obvious to one having ordinary skill in the art to include such a field in a packet header so that a reception router can check and verify the content of the packet header with the lookup table for routing the packet to the proper destination.

***Response to Argument***

5. Applicant's arguments filed on 04/02/2003 have been fully considered but they are not persuasive.

Applicant argues that Ellinas does not disclose at least one protecting router comprising a router table, the router table having an entry identifying an alternative route around an adjacent router to the protecting router in case of failure of the adjacent router. However, Examiner respectfully disagrees with the argument because Ellinas discloses a protecting node having a switch inside (router), col.3 lines 30-65, comprising a look-up table (router table) having mapping entries identifying protecting cycle (alternative route) around a failed node (adjacent node) within the network, col.7 lines 35-40, figure 2b.

Applicant argues Ellinas does not disclose that the data message or packet comprising an ID field specifies a cycle of router. However, Examiner respectfully disagrees with the argument because it would have been obvious to one having ordinary skill in the art to include such a field in a packet header so that a reception router can check and verify the content of the packet header with the lookup table for routing the packet to the proper destination.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

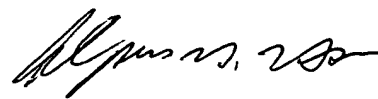
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2665

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (703) 308-4388. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.



ALPUS H. HSU  
PRIMARY EXAMINER